

عنوان مقاله:

Comparison of the Immunogenicity of Four Infectious Bursal Disease Intermediate Vaccines in Commercial Broiler Flocks in Iran: A Field Trial Study

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نویسندگان:

M. M. Ebrahimi - *Department of Poultry Viral Vaccines Research and Production, Razi Vaccine and Serum Research Institute, Agricultural Research Education and Extension Organization (AREEO), Karaj, Iran*

A. R. Yousefi - *Department of Pathology and Experimental Animals, Razi Vaccine and Serum Research Institute, Agricultural Research Education and Extension Organization (AREEO), Karaj, Iran*

Sh. Shahsavadi - *Department of Poultry Viral Vaccines Research and Production, Razi Vaccine and Serum Research Institute, Agricultural Research Education and Extension Organization (AREEO), Karaj, Iran*

M. Zaghari - *Department of Animal Sciences, College of Agriculture and Natural Resource, University of Tehran, Karaj, Iran*

M. R. Bassami - *Department of Clinical Sciences, Faculty of Veterinary Medicine, Ferdowsi University of Mashhad, Mashhad, Iran*

خلاصه مقاله:

Infectious bursal disease (IBD) is a highly contagious disease in young chickens worldwide. The major strategy for the prevention and control of IBD virus (IBDV) is vaccination. Therefore, the present study aimed to compare the immunogenicity of four commercially available IBD vaccines on broilers (Ross 308) that were raised in areas with very virulent IBDV infection history. Two commercial broiler farms with four standard poultry houses were selected in Alborz ($n=6,250$ birds per house) and Khorasan Razavi ($n=8,000$ birds per house) provinces of Iran. In each farm, the houses were randomly assigned to one of the four IBD intermediate vaccine brands including Dn, Vc, Ch, and Razi. The birds in Alborz were vaccinated against IBDV via drinking water at 18 and 22; and 15 and 21 days of age in Alborz and Khorasan Razavi flocks, respectively. The enzyme-linked immunosorbent assay antibody titers against IBDV were measured in 20 birds per group at 1, 28, 35, and 42 days of age. In addition, production attributes including body weight, feed conversion ratio, mortality, and production index were measured during the research period. According to the findings, the IBD antibody titers were not affected by the vaccine brands at 28, 35, and 42 days of age ($P>0.05$). Following the second IBD vaccination, an increasing trend in IBD antibody titers was noted in the Razi vaccine as well as other brands at days 35 and 42 compared to the previously recorded titers ($p < 0.05$). Moreover, the production attributes of the flocks receiving various IBDV vaccine brands were not different ($P>0.05$). Regarding the productivity indices and high immunogenicity levels, the results indicated that the potential of the IBD Razi vaccine was comparable to the other investigated brands of commercial IBD vaccines, and nominated it as an immunogenic candidate vaccine for use in commercial broilers.

کلمات کلیدی:

Antibody titer, Broiler, Immunity, Infectious bursal disease, Vaccination

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